While there has been a substantial decline in lead exposure in the United States during the past two decades, mobilization of existing lead stored in bone potentially represents an important endogenous source of exposure for menopausal women. It has been hypothesized that lead may be mobilized from skeletal stores during conditions of high bone turnover, such as during menopause. However, such mobilization has not been documented in prospective studies. This discussion is focussed on some of the methodological difficulties to be anticipated in longitudinal studies of lead mobilization specific to menopause and the issues that need to be taken into account when evaluating the results of such studies. To evaluate whether lead mobilization occurs during menopause, a prospective repeated measures design is needed using X-ray fluorescence analysis of lead in bone and serial measurements of blood lead. Potential confounders and effect modifiers also need to be taken into account in the statistical analysis.

**Abstract**

While there has been a substantial decline in lead exposure in the United States during the past two decades, mobilization of existing lead stored in bone potentially represents an important endogenous source of exposure for menopausal women. It has been hypothesized that lead may be mobilized from skeletal stores during conditions of high bone turnover, such as during menopause. However, such mobilization has not been documented in prospective studies. This discussion is focussed on some of the methodological difficulties to be anticipated in longitudinal studies of lead mobilization specific to menopause and the issues that need to be taken into account when evaluating the results of such studies. To evaluate whether lead mobilization occurs during menopause, a prospective repeated measures design is needed using X-ray fluorescence analysis of lead in bone and serial measurements of blood lead. Potential confounders and effect modifiers also need to be taken into account in the statistical analysis.

**Keywords**

lead; menopause; estrogens.